We Claim:

1. A method of diagnosing the intensity of a pain perceived by a patient comprising determining the amount of a marker in a biological sample obtained from said patient wherein said marker correlates with the perception of the pain.

2. The method of claim 1 wherein the pain is chronic spinal pain.

3. The method of claim 1 wherein the pain marker is a neurotransmitter or a metabolic product of a neurotransmitter.

4. The method of claim 3 wherein the marker is cholinesterase.

5. The method of claim 4 wherein the biological sample is blood or serum and the marker is serum cholinesterase.

6. The method of claim 1 further including the step of separating components within the biological sample.

7. The method of claim 6 wherein separating comprises an electrophoretic separation.

8. The method of claim 1 wherein the marker is an enzyme and said enzyme in the biological sample is reacted with a substrate to produce a detectable product.

9. A method of determining the intensity of a pain perceived by a patient comprising the steps of:

collecting a biological sample from the patient;

determining the amount of an enzyme in the biological sample; and

determining the intensity of pain perceived in the patient based on the amount of enzyme in said sample.

10. The method of claim 9 wherein the pain is chronic spinal pain.

11. The method of claim 9 wherein the biological sample is selected from the group consisting of samples of blood, serum, lymph fluid, tears, semen, intracellular fluid, interstitial fluid, cerebrospinal fluid, sweat, urine and saliva.

12. The method of claim 9 wherein the enzyme is a cholinesterase.

13. The method of claim 11 wherein the sample is serum and the cholinesterase is serum

cholinesterase.

14. The method of claim 9 further comprising determining the relative amount of cholinesterase in said sample as compared to the amount of cholinesterase in a control sample obtained from a subject without pain.

15. The method of claim 14 wherein the patient and the subject are the same person.

16. A method for determining the intensity of a pain perceived by a patient by determining the amount of cholinesterase in a sample of body fluid obtained from the patient.

17. The method of claim 16 wherein the pain is chronic spinal pain.

18. A method for determining the level of stress perceived by an individual comprising:

collecting a biological sample from the individual;

determining the amount of a stress-related marker in the biological sample; and

determining the level of stress perceived by the individual based on the amount of the marker in the sample.

19. The method of claim 19 wherein the marker is cholinesterase.

20. The method of claim 19 wherein the sample is selected from the group consisting of blood, serum, lymph fluid, tears, semen, intracellular fluid, interstitial fluid, cerebrospinal fluid, sweat, urine and saliva.

21. A method for identifying a marker that correlates with the intensity of a pain perceived by a patient comprising the steps of:

collecting a serum sample from the patient;

separating the components within said serum sample by electrophoresis in a gel;

reacting the gel with a diazonium salt and a substrate for a period of time to form a detectable band comprising an insoluble diazonium complex; and

identifying the size and location of the detectable band to identify said marker.

22. The method of claim 21 wherein the gel has a gradient polymer density.

23. The method of claim 21 wherein the diazonium salt is 4-chloro-2-methylaniline.

24. The method of claim 21 wherein reacting is terminated by adding a reagent to the gel

wherein said reagent is selected from the group consisting of acetic acid, formic acid and citric acid and mixtures thereof.

25. The method of claim 21 further comprising performing densitometry analysis on said gel.

26. A method for determining the efficacy of a treatment for pain comprising:

determining a first severity of pain in a patient by determining the amount of a marker in a first biological sample obtained from said patient;

administering the treatment to said patient;

determining a second severity of pain in the patient by determining the amount of said marker in a second biological sample obtained from the treated patient; and

comparing the first severity of pain to the second severity of pain to determine the effectiveness of said treatment.

27. The method of claim 26 wherein the treatment is an analgesic composition.

28. The method of claim 27 wherein the analgesic composition comprises aspirin, acetaminophen, codeine, morphine, butorphanol, diperone, fenoprofen, fentanyl, banamine and combinations thereof.

29. A diagnostic kit for determining the severity of a pain in a patient comprising at least one agent that reacts with a marker whose presence in a biological sample correlates with the perception of the pain in a patient from whom the sample is obtained.

30. The diagnostic kit of claim 29 wherein the agent comprises a plurality of antibodies that specially bind to said marker.

31. The diagnostic kit of claim 29 wherein the antibodies are polyclonal antibodies, monoclonal antibodies or fragments of polyclonal or monoclonal antibodies.

32. The diagnostic kit of claim 29 wherein the marker is an enzyme and the agent is a substrate for that enzyme.

33. The diagnostic kit of claim 32 wherein the substrate is selected from the group consisting of acetylcholine, acetylcholine analog, a protein cleavable by cholinesterase, 4-

chloro-2-methylaniline and combinations thereof.

34. A pharmaceutical composition comprising a pain-associated marker that selectively inhibits the perception of pain when administered to a patient.

35. The composition of claim 34 wherein the pain-associated marker is a cholinesterase.

36. The composition of claim 34 further comprising a pharmaceutically acceptable carrier.

37. The composition of claim 34 wherein the pharmaceutically acceptable carrier is selected from the group consisting of water, alcohol, oil, saccharide, starch, cellulose, fatty acid, lipid and combinations thereof.

38. A pharmaceutical composition comprising an agent that selectively inhibits the activity of a pain-associated marker.

39. The composition of claim 38 wherein the agent inhibits an activity of acetylcholine.

40. The composition of claim 38 which is a timed-release composition.

41. The composition of claim 38 which is in the form of a capsule, a tablet, a suspension or a liquid.

42. A method of treating a pain perceived by a patient comprising:

collecting a biological sample from the patient;

determining the amount of a pain-associated marker in the biological sample;

determining a therapeutically effective dose of a pharmaceutical composition for the treatment of the pain; and

administering the therapeutically effective dose to the patient.

43. The method of claim 42 wherein the pain is chronic spinal pain.

44. The method of claim 42 wherein the pharmaceutical composition comprises a therapeutically-effective formulation of an agent that alters the activity of the pain-associated marker.

45. The method of claim 44 wherein the pain-associated marker is a cholinesterase.

46. The method of claim 44 wherein the agent is an analgesic.

47. The method of claim 42 wherein the biological sample is selected from the group

consisting of samples of blood, serum, lymph fluid, tears, semen, intracellular fluid, extracellular fluid, interstitial fluid, cerebrospinal fluid, sweat, urine and saliva.

48. The method of claim 42 wherein administering results in a systemic increase of the marker in the blood of the patient.

49. A method of modulating the amount of pain perceived by a patient comprising:

administering a therapeutically effective dose of a pain-associated marker to the patient.

50. The method of claim 49 wherein administration is to a cranial nerve of the patient.

51. The method of claim 50 wherein the cranial nerve is a trigeminal nerve.

52. The method of claim 49 wherein administration is to a tissue of the cornea of the patient.

53. A method of modulating the amount of a pain perceived by a patient comprising: administering a therapeutically effective dose of an agent to the patient wherein said agent alters the activity of a pain-associated marker of the patient.

54. The method of claim 53 wherein modulation does not completely eliminate the pain.